

FIG. 1

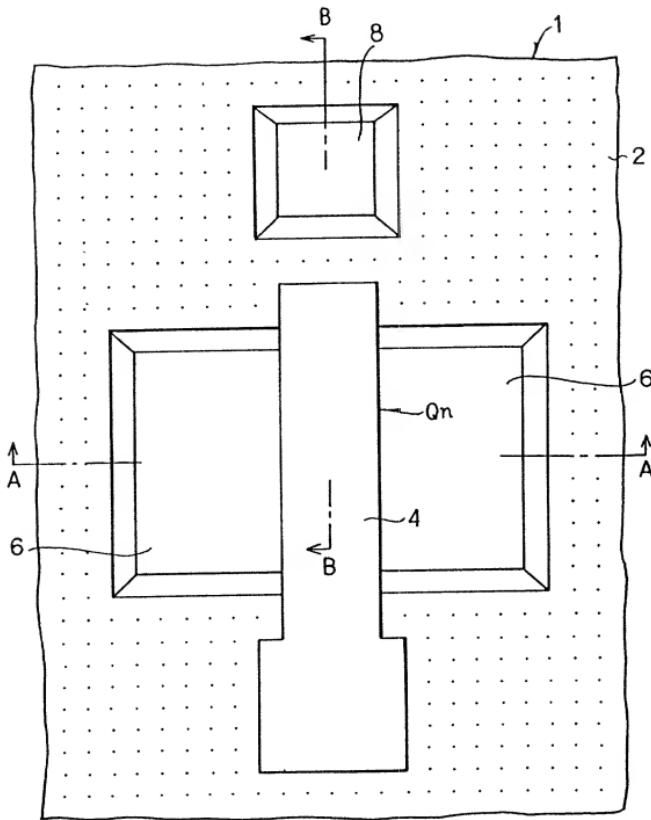


FIG. 2

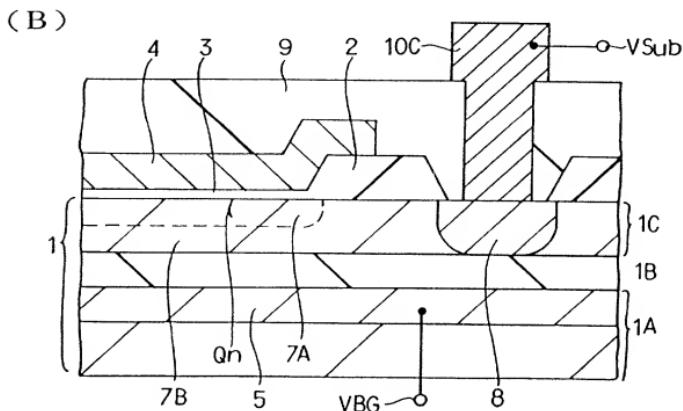
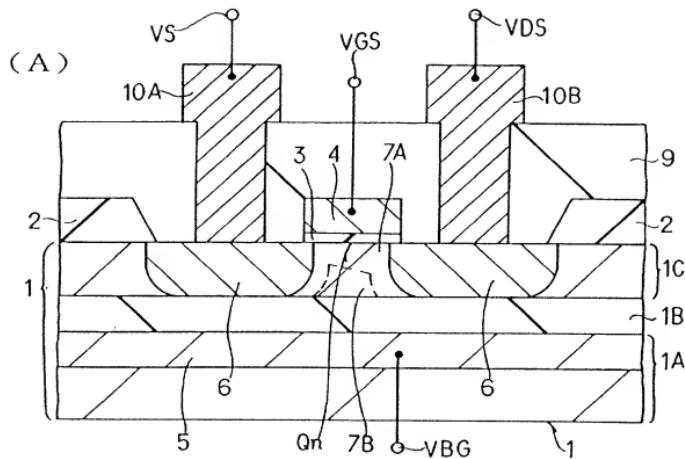


FIG. 3

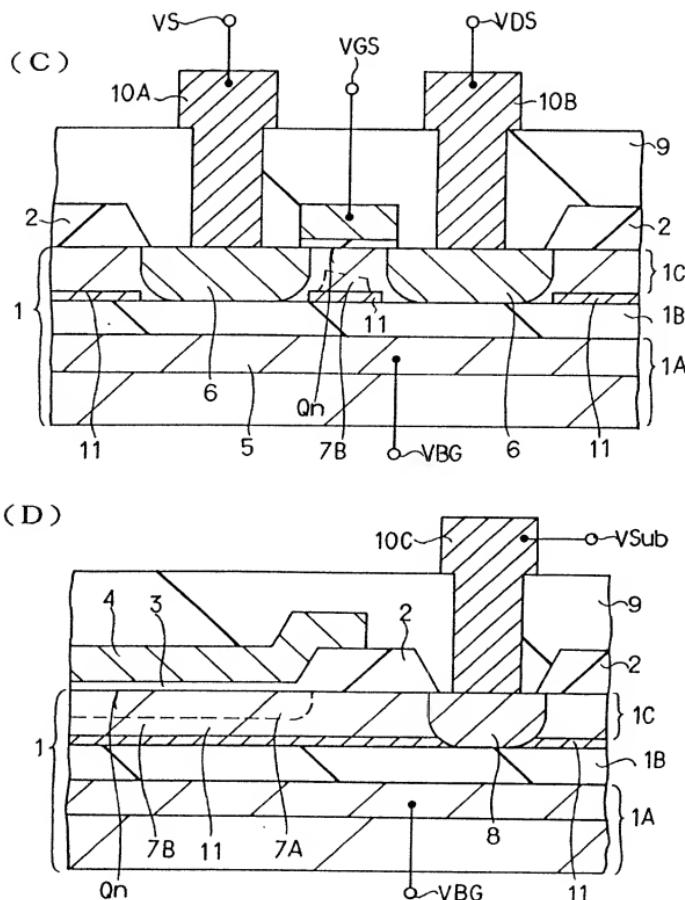


FIG. 4

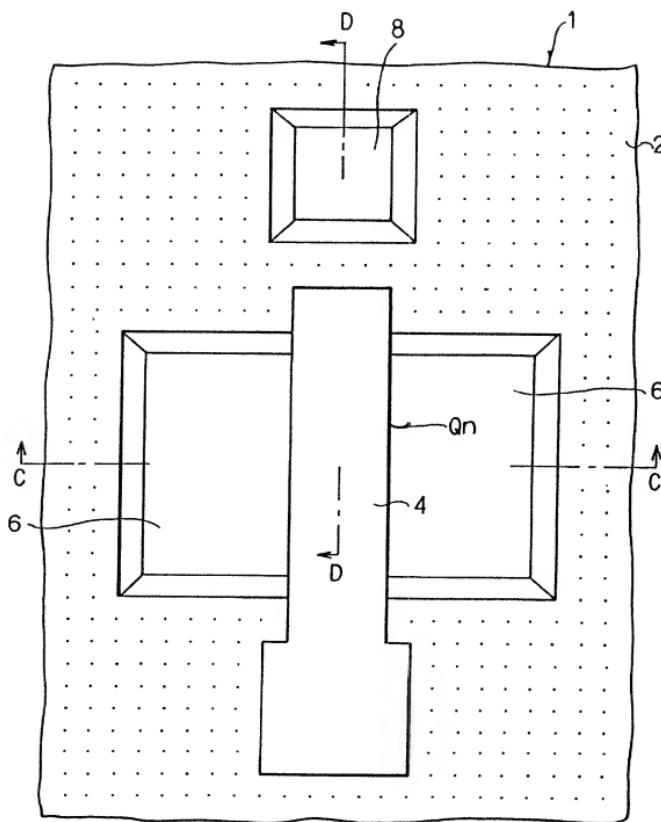


FIG. 5

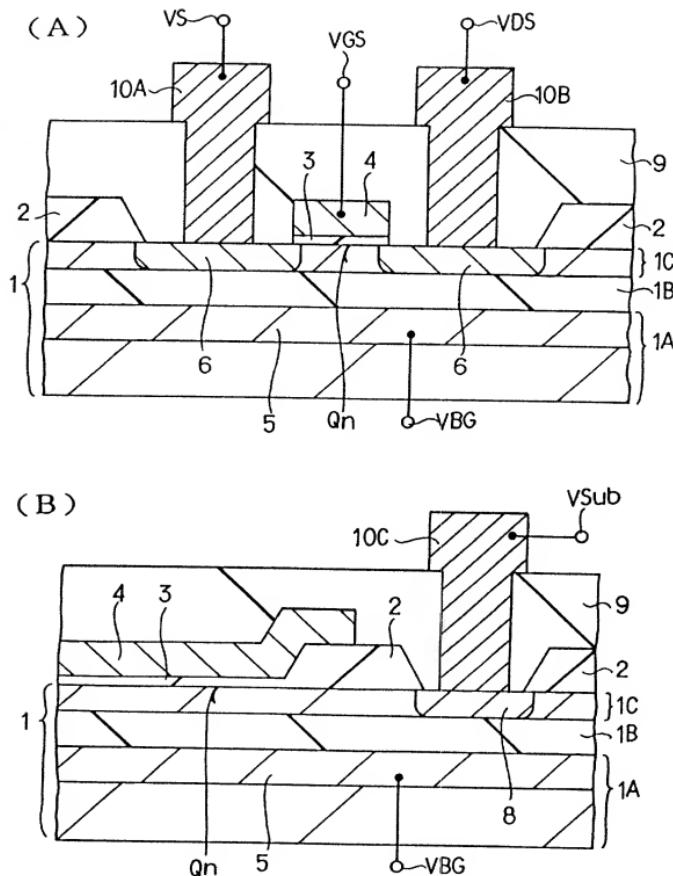


FIG. 6

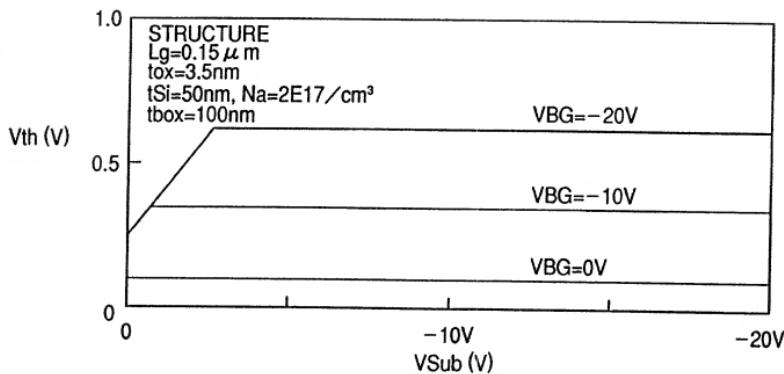
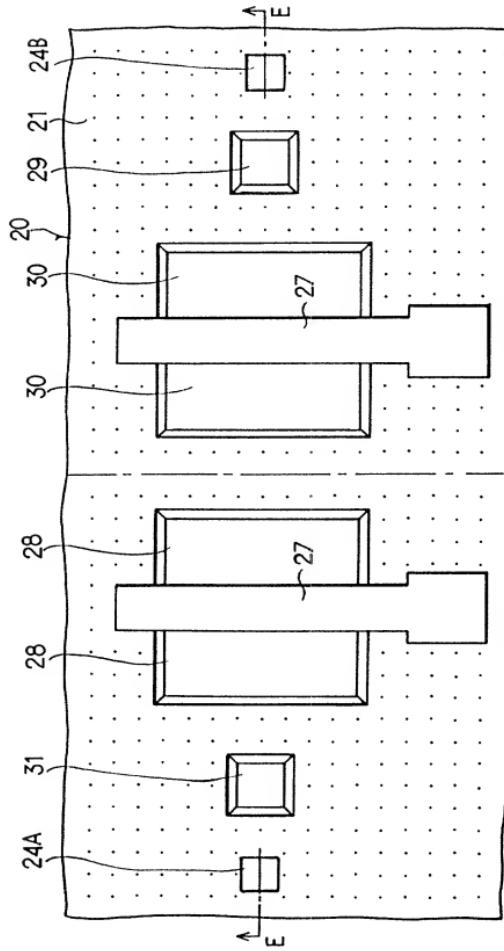


FIG. 7



8
FIG.

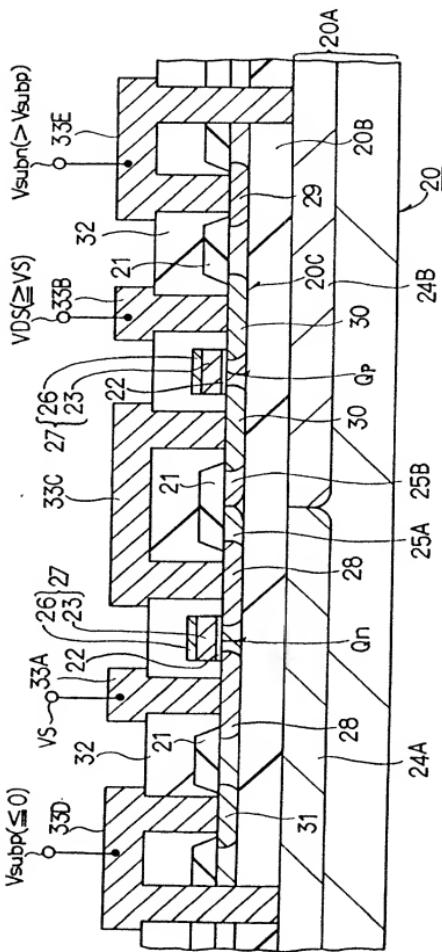
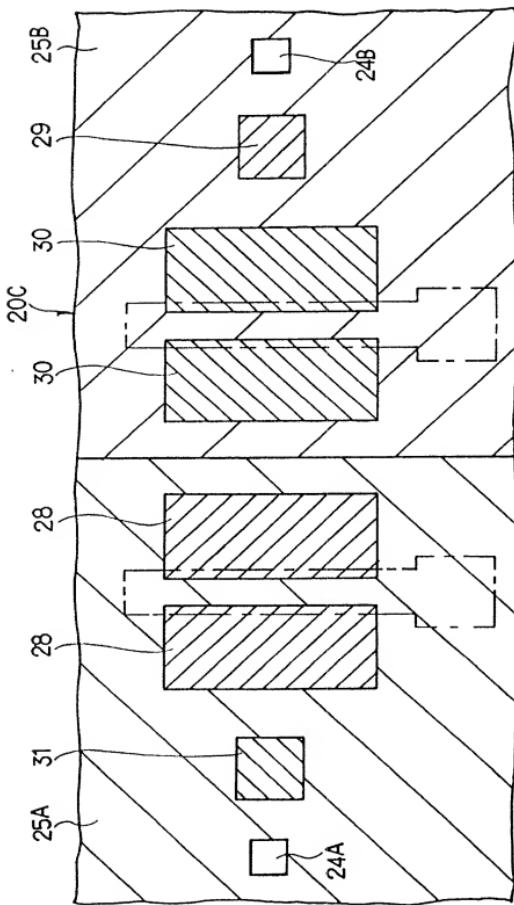


FIG. 9



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FIG. 10

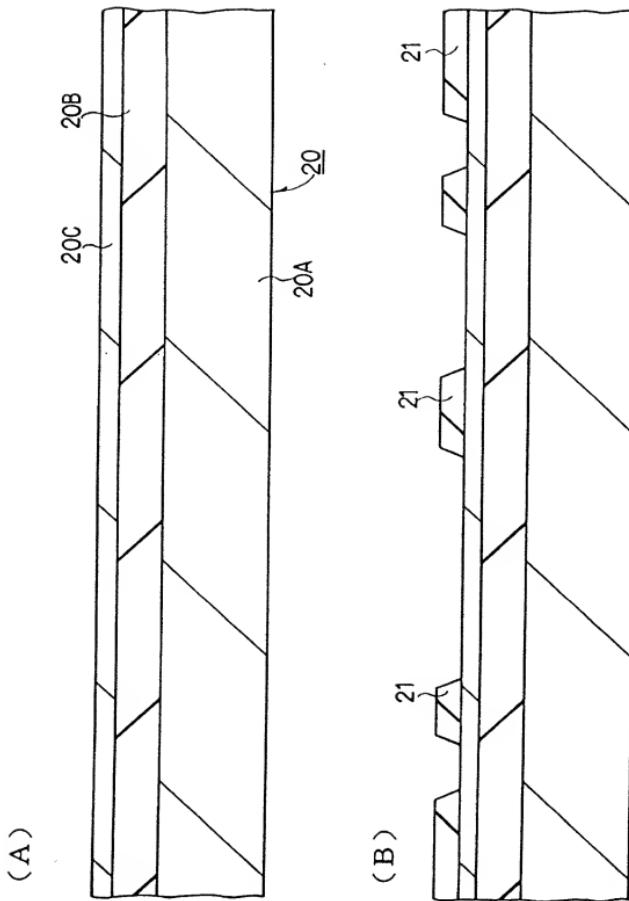


FIG. 11

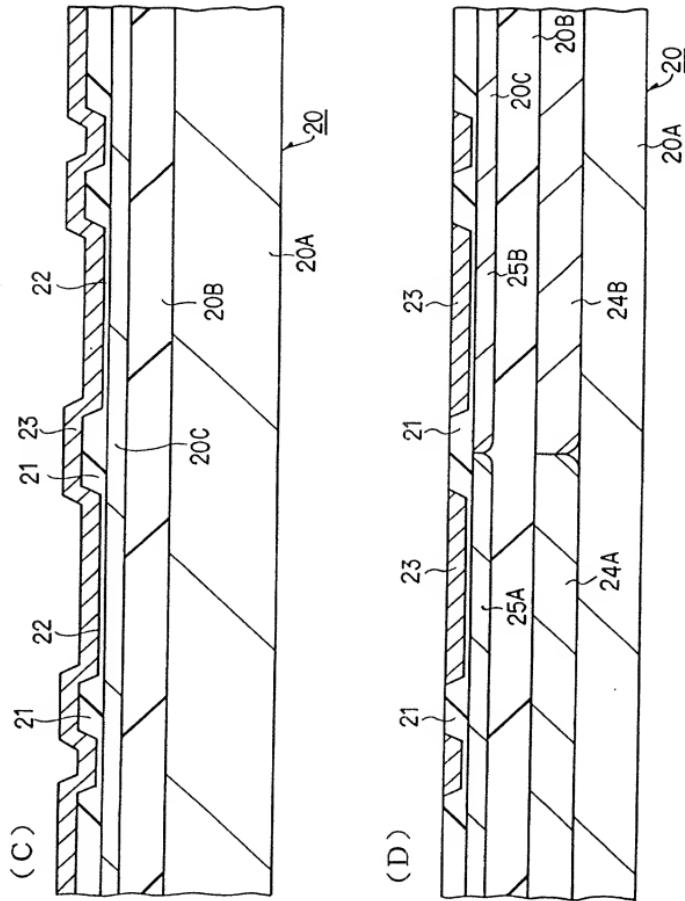


FIG. 12

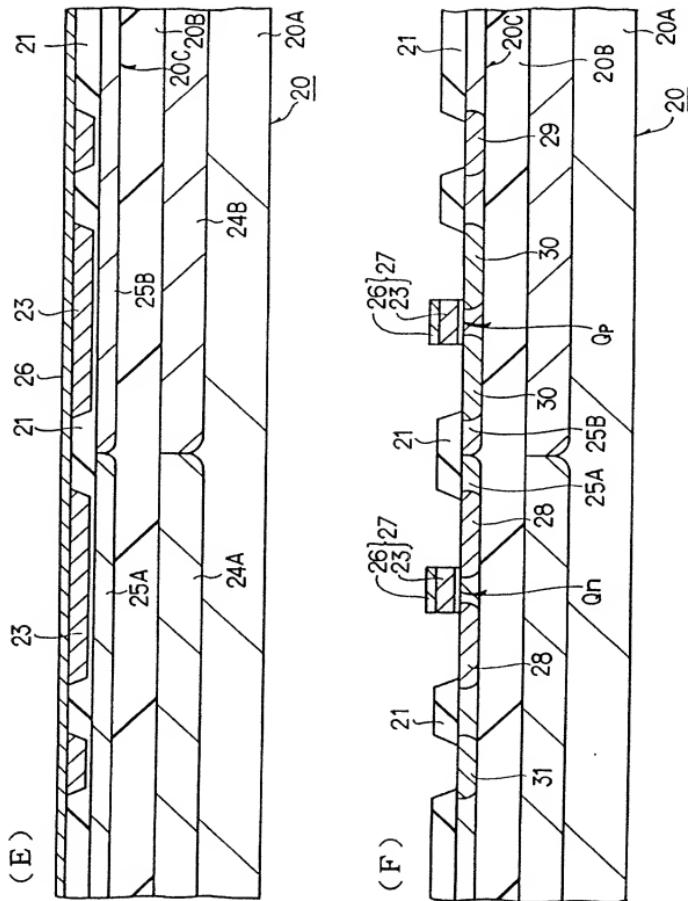


FIG. 13

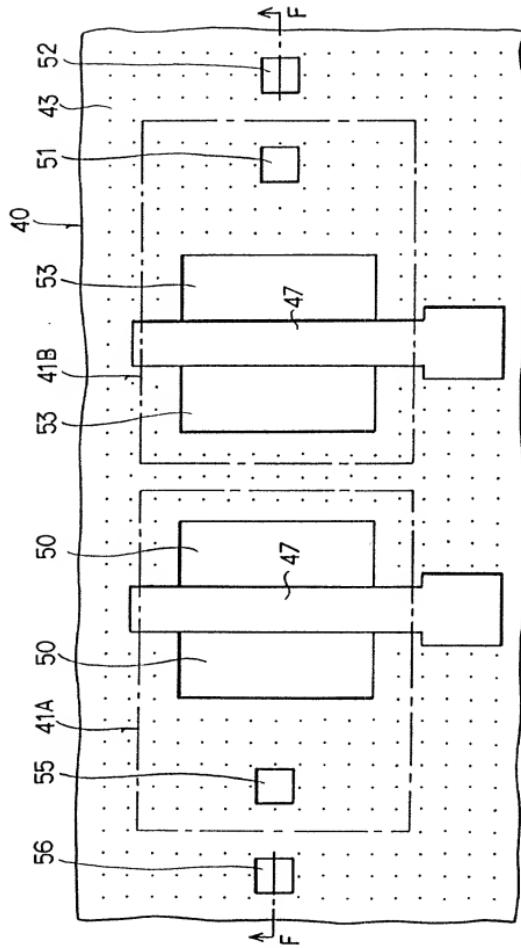


FIG. 14

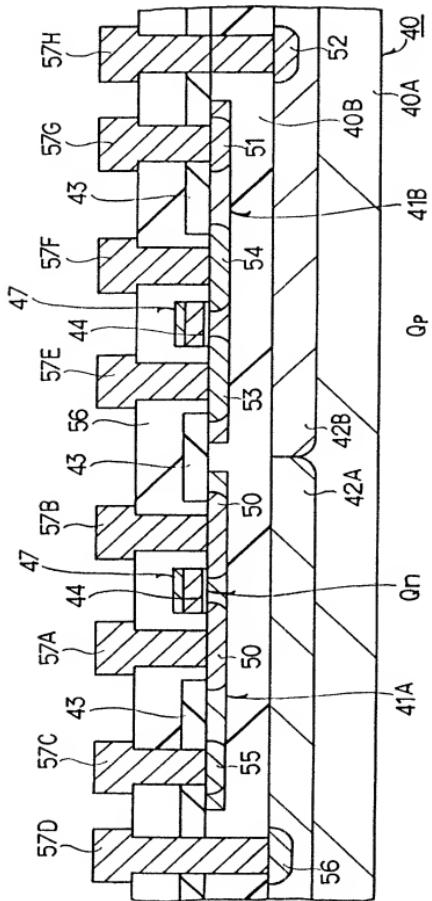
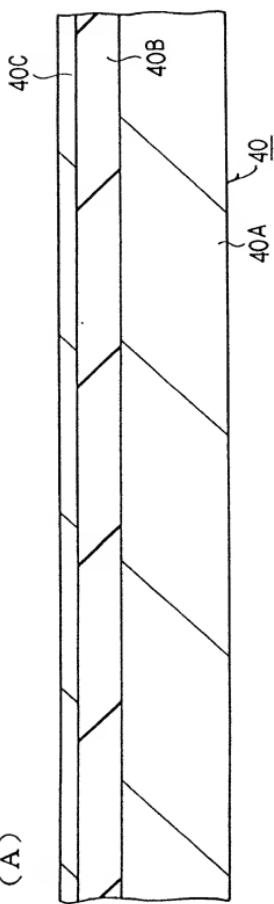


FIG. 15

(A)



(B)

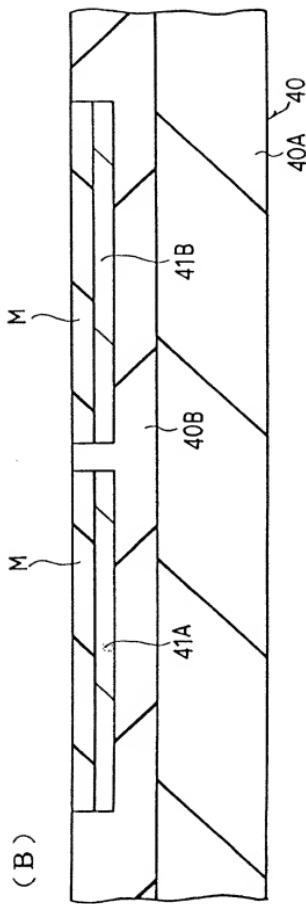
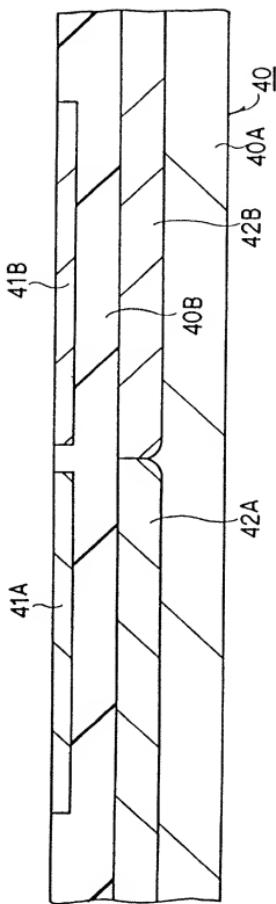


FIG. 16

(C)



(D)

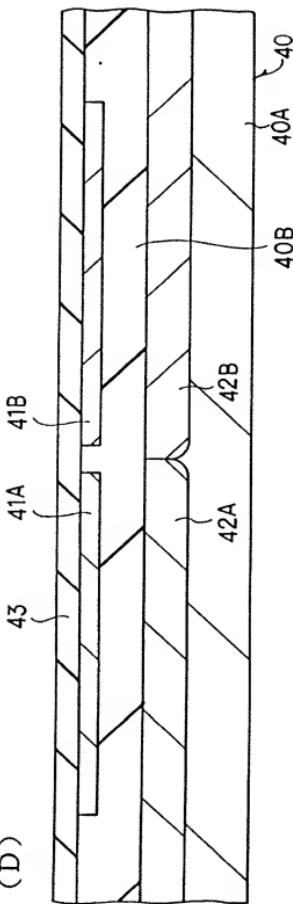


FIG. 17

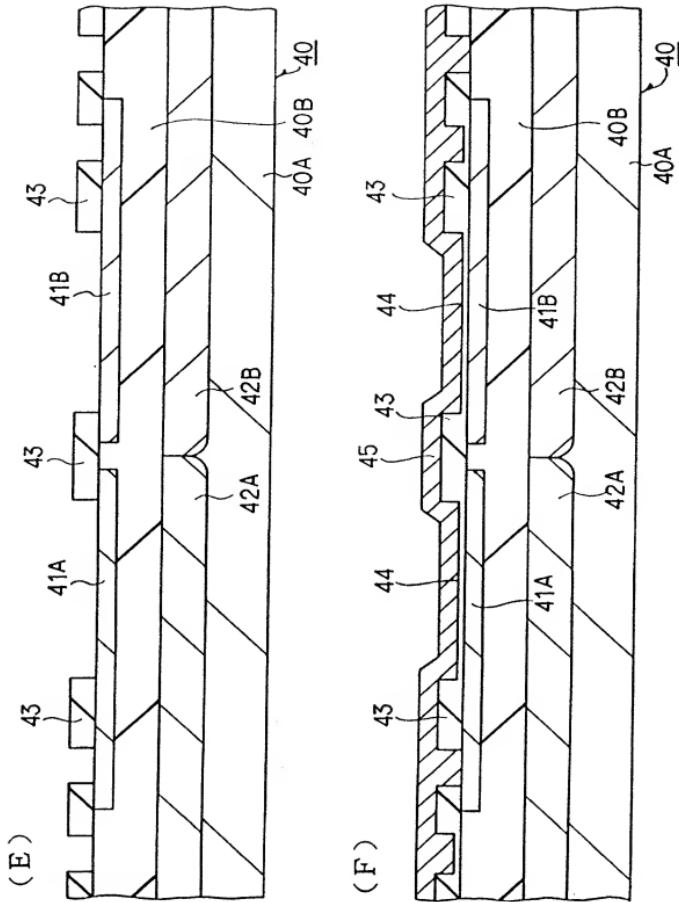


FIG. 18

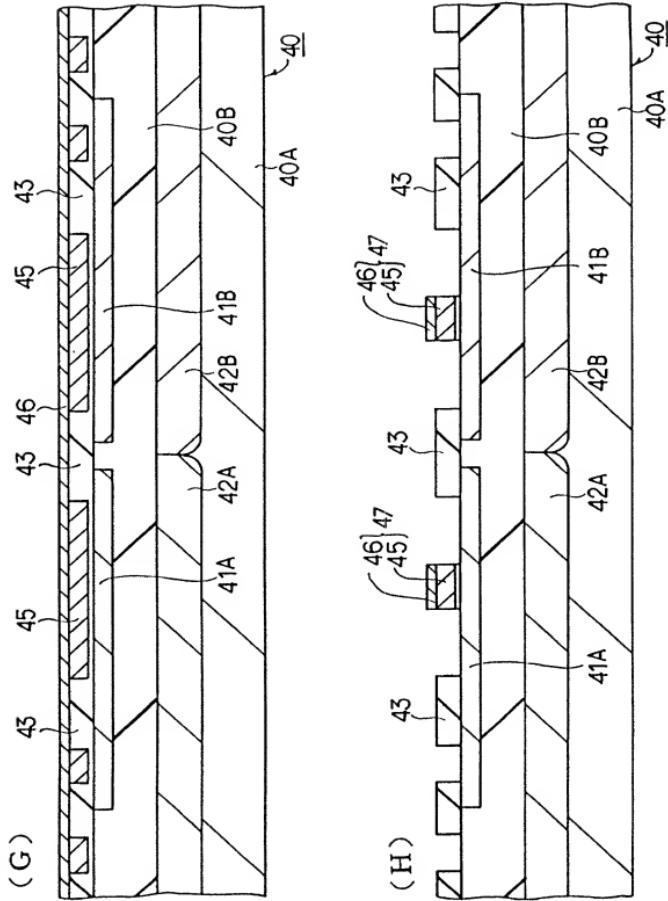


FIG. 19

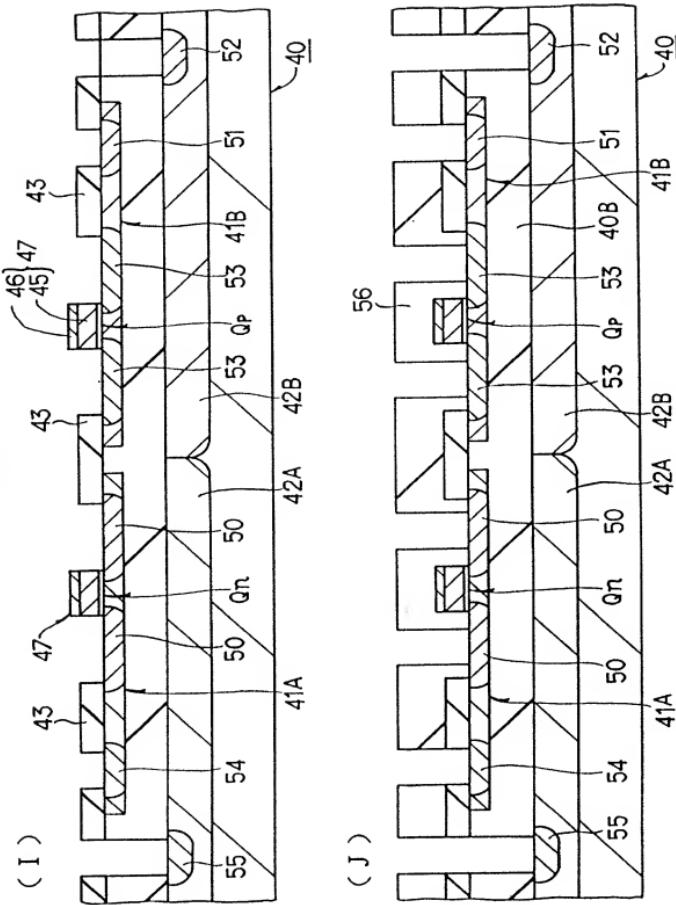


FIG. 20

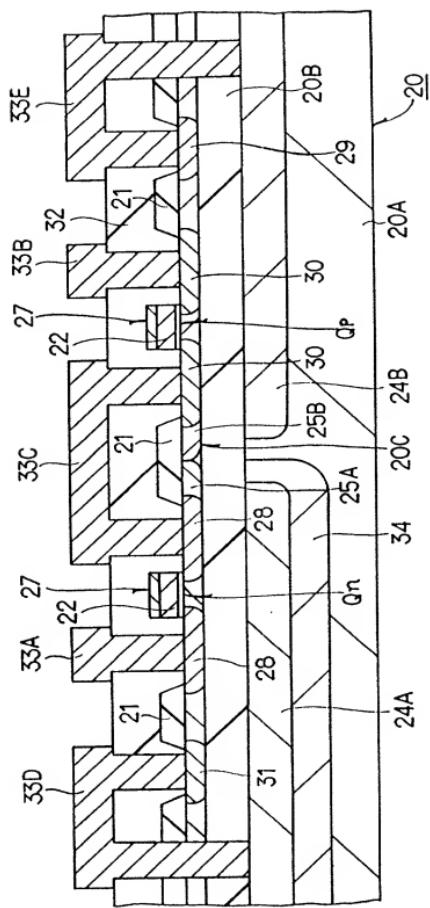


FIG. 21

(1) NORMAL OPERATION MODE

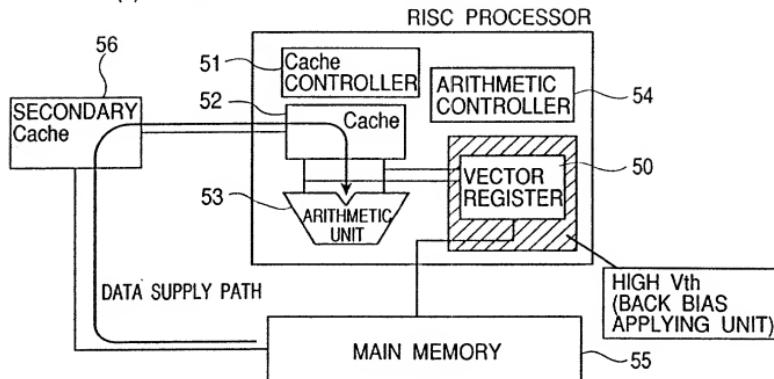
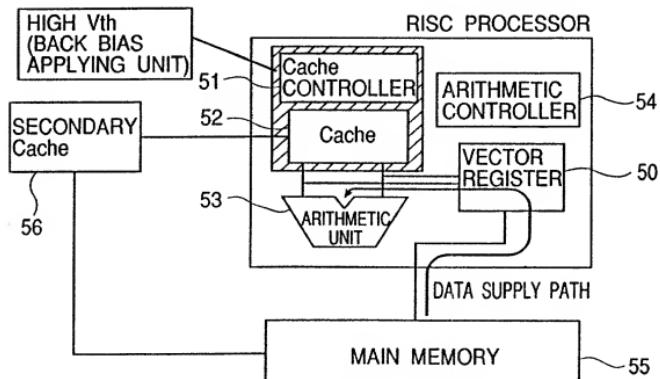
(2) MASS DATA NUMERICAL CALCULATION MODE
(VECTOR COMPUTE MODE)

FIG. 22

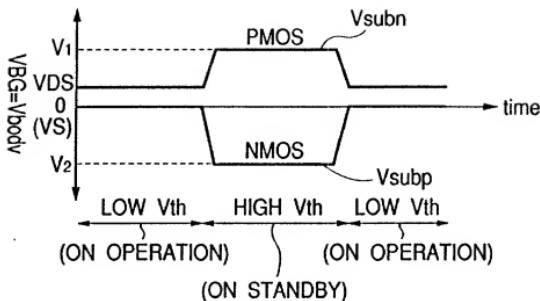
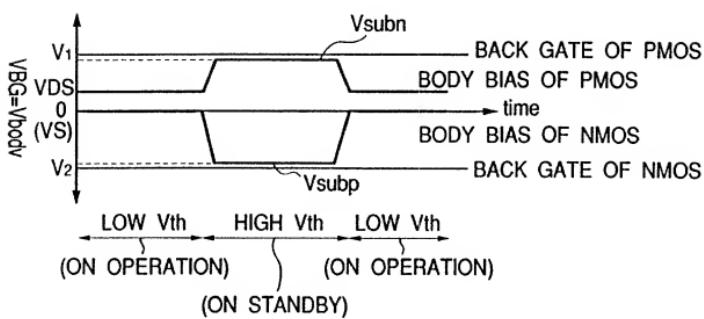


FIG. 23



UNITED STATES PATENT AND TRADEMARK OFFICE
DOCUMENT CLASSIFICATION BARCODE SHEET



Oath/Declaration, Small Entity, and Power of Attorney

8

2000-114803

Level - 2
Version 1.1
Updated - 8/01/01

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Declaration and Power of Attorney For Patent Application

特許出願宣言書及び委任状

Japanese Language Declaration

日本語宣言書

下記の氏名の発明者として、私は以下の通り宣言します。

As a below named inventor, I hereby declare that:

私の住所、私書箱、国籍は下記の私の氏名の後に記載された通りです。

My residence, post office address and citizenship are as stated
next to my name.

下記の名称の発明に関して請求範囲に記載され、特許出願している発明内容について、私が最初かつ唯一の発明者（下記の氏名が一つの場合）もしくは最初かつ共同発明者であると（下記の名称が複数の場合）信じています。

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

A SEMICONDUCTOR DEVICE

The specification of which is attached hereto unless the following box is checked:

____月____日に提出され、米国出願番号または特許協定条約
国際出願番号を_____とし、
特許出願の場合は、上記欄に記入せよ

was filed on 22/September/1998,
as United States Application Number or
PCT International Application Number
PCT/JP98/04256 and was amended on
(if applicable)

私は、特許請求範囲を含む上記訂正後の明細書を検討し、内容を理解していることをここに表明します。

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

私は、連邦規則法典第37編第1条56項に定義されるとおり、特許資格の有無について重要な情報を開示する義務があることを認めます。

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

**Japanese Language Declaration
(日本語宣言書)**

私は、米国法典第35編119条(a) - (d)項又は365条(b)項に基づき下記の、米国以外の国の少なくとも一ヵ国を指定している特許協力条約365(a)項に基づく国際出願、又は外国での特許出願もしくは発明者証の出願についての外国優先権をここに主張するとともに、優先権を主張している、本出願の前に出願された特許または発明者証の国外出願を以下に、枠内をマークすることで、示している。

Prior Foreign Application(s)

外国での先行出願

9-320973	Japan
(Number) (番号)	(Country) (国名)
(Number) (番号)	(Country) (国名)

私は、第35編米国法典119条(e)項に基いて下記の米国特許出願規定に記載された権利をここに主張いたします。

(Application No.) (出願番号)	(Filing Date) (出願日)
-----------------------------	------------------------

私は、下記の米国法典第35編120条に基いて下記の米国特許出願に記載された権利、又は米国を指定している特許協力条約365条(c)に基づく権利をここに主張します。また、本出願の各請求範囲の内容が米国法典第35編112条第1項又は特許協力条約で規定された方法で先行する米国特許出願に開示されていない限り、その先行米国出願書提出日以降で本出願書の日本国内または特許協力条約国提出日までの期間中に入手された、連邦規則法典第37編1条56項で定義された特許資格の有無に関する重要な情報について開示義務があることを認識しています。

(Application No.) (出願番号)	(Filing Date) (出願日)
(Application No.) (出願番号)	(Filing Date) (出願日)

私は、私自身の知識に基づいて本宣言書の中で私が行なう表明が真実であり、かつ私の入手した情報と私の信じるところに基づく表現が全て真実であると信じていること、さらに故意になされた虚偽の表明及びこれと同等の行為は米国法典第18編第1001条に基づき、罰金または拘禁、もしくはその両方ににより懲罰されること、そしてそのような故意による虚偽の声明を行なえば、出願した、又は既に許可された特許の有効性が失われるることを認識し、よってここに上記のごとく宣誓を致します。

I hereby claim foreign priority under Title 35, United States Code, Section 119 (a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Priority Not Claimed
優先権主張なし

21/November/1997 (Day/Month/Year Filed)	<input type="checkbox"/>
(出願年月日) (Day/Month/Year Filed)	<input type="checkbox"/>

I hereby claim the benefit under Title 35, United States Code, Section 120(e) of any United States provisional application(s) listed below.

(Application No.) (出願番号)	(Filing Date) (出願日)
-----------------------------	------------------------

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of application.

(Status: Patented, Pending, Abandoned) (現況: 特許許可済、係属中、放棄済)	<input type="checkbox"/>
(Status: Patented, Pending, Abandoned) (現況: 特許許可済、係属中、放棄済)	<input type="checkbox"/>

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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**Japanese Language Declaration
(日本語宣言書)**

委任状： 私は下記の発明者として、本出願に関する一切の手続きを米特許商標局に対して遂行する弁護士または代理人として、下記の者を指名いたします。（弁護士、または代理人の氏名及び登録番号を明記のこと）

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number)

Donald R. Antonelli, Reg. No. 20,296; David T. Terry, Reg. No. 20,178; Melvin Kraus, Reg. No. 22,466; Stanley A. Wal, Reg. No. 26,432; William I. Solomon, Reg. No. 28,565; Gregory E. Montone, Reg. No. 28,141; Ronald J. Shore, Reg. No. 28,577; Donald E. Stout, Reg. No. 26,422; Alan E. Schiavelli, Reg. No. 32,087; James N. Dresser, Reg. No. 22,973 and Carl L. Brundidge, Reg. No. 29,621

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Telephone: (703) 312-6600
Fax: (703) 312-6666

唯一または第一発明者	Full name of sole or first inventor Shinichiro MITANI	
発明者の署名	Inventor's signature <i>Shinichiro mitani</i>	Date <i>21/march/2000</i>
住所	Residence Tokorozawa, Japan	
国籍	Citizenship Japan	
私書箱	Post Office Address c/o Hitachi, Ltd., Intellectual Property Group New Marunouchi Bldg. 5-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8220, Japan	

（第二以降の共同発明者についても同様に記載し、署名すること） (Supply similar information and signature for second and subsequent joint inventors.)

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第二共同発明者		Full name of second joint inventor, if any
		Takahide IKEDA
第二共同発明者の署名	日付	Second inventor's signature Date <i>Takahide Ikeda</i> 2/March/2000
住所		Residence
国籍		Citizenship
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		New Marunouchi Bldg. 5-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8220, Japan
第三共同発明者		Full name of third joint inventor, if any
		Kazutaka MORI
第三共同発明者の署名	日付	Third inventor's signature Date <i>Kazutaka Mori</i> 2/March/2000
住所		Residence
国籍		Citizenship
私書箱		Post Office Address c/o Hitachi, Ltd., Intellectual Property Group
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第四共同発明者		Full name of fourth joint inventor, if any
		Hisayuki HIGUCHI
第四共同発明者の署名	日付	Fourth inventor's signature Date <i>Hisayuki Higuchi</i> 16/march/2000
住所		Residence
国籍		Citizenship
私書箱		Post Office Address c/o Hitachi, Ltd., Intellectual Property Group
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第五共同発明者		Full name of fifth joint inventor, if any
第五共同発明者の署名	日付	Fifth inventor's signature Date
住所		Residence
国籍		Citizenship
私書箱		Post Office Address

(第六以降の共同発明者についても同様に記載し、署名をすること)
(Supply similar information and signature for sixth and subsequent joint inventors.)